I CLAIM:

1. An additive composition for a combustible fuel, which is also used as a fuel composition, to utilize readily available and renewable resources, to improve liquid combustible fuel properties, reduce undesirable elements such as sulphur, aromatic hydrocarbons, and glycerine from the content of the fuel, produce improved combustion, and to reduce visible smoke, particulates and other noxious emissions production of the combusted fuel, which additive or fuel composition comprises:

a. one or more alcohols selected from the group consisting of water-soluble alcohols:

(i) having between about 1 and 2 carbon atoms, selected from the group consisting of methanol and ethanol in an anhydrous state or as a 0.5-36% aqueous solution by volume; or

(ii) having between about 3 and 5 carbon atoms, selected from the group consisting of propanol, iso-propanol, butanol, and pentanol by volume or combinations of (a)(i) and a(ii); and

optionally one or more of the following:

b. one or more alcohols selected from the group consisting of:

(i) straight or branched chain, saturated or unsaturated alcohols, which are clear and liquid at room temperature, and having between about 6 and 12 carbon atoms, or,

(ii) straight- or branched-chain, saturated or unsaturated long-chain fatty alcohols, which are solid at room temperature, having from between about 13 and 18 carbon atoms, or combinations of (b)(i) and (b)(ii);

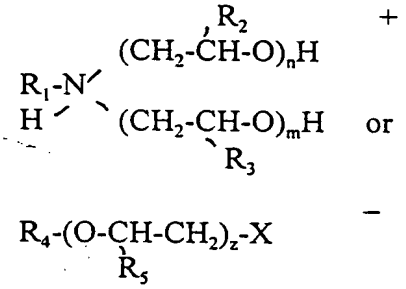
c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles (units);

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having between about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein components a and one or more of b, c, d, and e, when combined with mixing with combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 99:1 to 0:100 by volume;

wherein said additive/fuel composition excludes ethylene glycol, glycerine, polyethylene, polypropylene, aromatic organic compounds, sulfur, sulfur compounds, metals, metal compounds, compounds of phenanthrene, and emulsifiers of the general formula:



wherein R_1 and R_4 each independently is a saturated or unsaturated, straight-chain or branched hydrocarbon aliphatic radical each of 4 to 24 carbon atoms (e.g., alkyl or alkenyl) or R_4 is alkylphenyl of 1 to 18 carbon atoms in the optionally branched alkyl chain or H; R_2, R_3 and R_5 each independently represent a methyl group or H, n plus m is an integer from 1 to 20; z is an integer from 0 to 15; and X is -COO(-) or -OCH_2COO(-), wherein, substituents R_2, R_3 and R_5 are the same or different in different monomer units of each chain, and optionally other organic diacids are excluded.

2. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 2 carbon atoms as defined herein in (a)(i), in an anhydrous state or as a 0.5-10% aqueous solution; and

b. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 3 and 5 carbon atoms as defined herein in (a)(ii),

wherein components a and b, when combined with mixing with the refined combustible fuel, form a clear stable solution or microemulsion having a viscosity similar to that of the liquid combustible fuel and where the ratio of combustible fuel:

additive ranges from about 99:1 to 1:99 by volume.

3. The additive composition of claim 1 wherein:

a) one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 2 carbon atoms as defined herein in a(i) in an anhydrous state or as a 0.5-5% aqueous solution;

b) one or more alcohols selected from the group consisting of alcohols, iso-propanol and butanol:

wherein components a and b, are present in a:b ratios from about 80:20 and 99:1 by volume wherein components a and b, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel; additive ranges from about 90:10 to 95:5 by volume.

4. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-20% aqueous solution;

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain, alcohols having between about 6 and 12 carbon atoms,

wherein components a and b, are present in a:b ratios ranging from about 3:1 and 1:3, wherein components a and b, when combined with mixing with combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 99:1 to 1:99 by volume.

5. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 5% aqueous solution denatured with iso-propanol, butanol or combinations thereof;

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 12 carbon atoms;

wherein components a and b, are present in a:b ratios ranging from 3:1 and 1:1 by volume wherein components a and b, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 80:20 to 99:1 by volume.

6. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein, in an anhydrous state or as a 0.5-20% aqueous solution; and

b. one or more alcohols selected from the group consisting clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms; and

c. one or more alcohols selected from the group consisting of ethoxylated alcohols having between about 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

wherein components a, b, and c are present in a:b:c ratios ranging from about 4:1:1 and 1:4:4 by volume, wherein components a, b, and c when combined with mixing with the combustible fuel, form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 99:1 to 1:99 by volume.

7. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-20% aqueous solution;

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 12 carbon atoms;

c. one or more alcohols selected from the group consisting of ethoxylated alcohols having between about 12 and 16 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

wherein components a, b, and c are present in a:b:c ratios ranging from about 4:1:1 and 1:4:4 by volume, and more preferably between about 4:1:1 and 4:2:1 by volume wherein components a, b, and c when combined with mixing with combustible

fuel, form a clear, stable microemulsion having a viscosity similar to that of the liquid fossil fuel, and where the ratio of combustible fuel:additive ranges from between about 80:20 and 99:1 by volume.

8. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5 to 20% aqueous solution; and

b. one or more alcohols selected from the group consisting of alcohols having between about 6 and 18 carbon atoms, ethoxylated where the ethylene oxide add-on is less than 5 moles;

wherein components a and b are present in a:b ratios ranging from between 3:1 and 1:2 by volume, wherein components a and b when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 99:1 to 1:99 by volume.

9. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-20% aqueous solution or combinations thereof;

b. one or more alcohols selected from the group consisting of alcohols having between about 6 and 12 carbon atoms ethoxylated where the ethylene oxide add-on 3 moles;

wherein components a and b are present in a:b ratios ranging from 3:1 and 1:2 by volume, and more preferably between about 3:1 and 2:1 by volume, wherein components a and b when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 65:35 to 99:1.

10. The additive composition of Claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-20% aqueous solution or combinations thereof;

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between

about 6 and 12 carbon atoms, and

c. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms;

d. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or iso-propyl, wherein trialkylamines are excluded; sufficient to neutralize between about 40 to 85 percent of the fatty acid of subpart c;

wherein components a, b, and c are present in a:b:c ratios ranging from about 4:1:1 and 1:4:4; by volume, wherein components a, b, c and d when combined with mixing with said combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 80:20 and 99:1 by volume.

11. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and

b. one or more alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, ethoxylated where the ethylene oxide add-on is 3 moles; and

c. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms; and

d. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded,

wherein components a, b, and c are present in a:b:c ratios ranging from about 5:1:1 and 1:4:4 by volume; wherein components a, b, c, and d when combined with mixing with the combustible fuel, form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 99:1 to 1:99 by volume.

12. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-20% aqueous solution or combinations thereof;

b. one or more alcohols selected from the group consisting of ethoxylated alcohols having between about 12 and 16 carbon atoms, where the ethylene oxide add-on is 3 moles;

c. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms;

d. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl wherein trialkylamines are excluded, sufficient to neutralize between about 40 to 85 percent of the fatty acid of subpart c;

wherein components a, b, and c are present in a:b:c ratios ranging from about 4:1:1 and 1:4:4; and preferably between about 4:1:1 and 3:1:1 by volume, wherein components a, b, c, and d when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 80:20 to 99:1 by volume.

13. The additive composition of Claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and

b. one or more alcohols selected from the group consisting of saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms; and

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles; and

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms; and

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine, wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein components a, b, c, and d are present in a:b:c:d ratios ranging from about 6:1:1:1 and 1:4:4:4 by volume; wherein components a, b, c, d, and e when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 99:1 to 1:99 by volume.

14. The additive composition of Claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein, in an anhydrous state or 5 to 10% aqueous ethanol denatured with methanol, iso-propanol, butanol or combinations thereof;

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 12 carbon atoms;

c. one or more alcohols selected from the group consisting of ethoxylated alcohols having between about 12 and 16 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atom; and preferably oleic acid and linoleic acid;

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded, sufficient to neutralize between about 40 to 85 percent of the fatty acid of subpart c;

wherein components a, b, c, and d are present in a:b:c:d ratios ranging from about 6:1:1:1 and 1:4:4:4 by volume, wherein components a, b, c, d, and e when combined with mixing with the combustible fuel form a clear, stable microemulsion

having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel:additive ranges from about 80:20 to 99:1 by volume.

15. The additive composition of Claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein components a and one or more of b, c, d, and e, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 95:5 to 99:1 by volume.

16. The additive composition of claim 1wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms, or between about 6 and 12 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein components a and one or more of b, c, d, and e, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 90:10 to 99:1 by volume.

17. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution, and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl wherein trialkylamines are excluded;

wherein components a and one or more of b, c, d and e, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 80:20 to 99:1 by volume.

18. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl wherein trialkylamines are excluded;

wherein components a and one or more of b, c, d and e, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to that of the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 60:40 to 99:1 by volume.

19. The additive composition of Claim1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution

selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein components a and one or more of b, c, d, and e, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 50:50 to 99:1 by volume.

20. The additive composition of Claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl wherein trialkylamines are excluded;

wherein components a and one or more of b, c, d and e, when combined with mixing with the combustible fuel form a clear, stable microemulsion having a viscosity similar to the liquid combustible fuel, and where the ratio of combustible fuel: additive ranges from about 1:99 to 50:50 by volume.

21. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl wherein trialkylamines are excluded;

wherein the combustible fuel is any conventional or synthetic combustible fuel.

22. The additive composition of claim 1, wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein the combustible fuel is a fossil fuel such oil, jet fuel, kerosene, other distillate fuels, coal as Diesel fuel, heating slurry, gasoline or combinations thereof.

23. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, diaklyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein the combustible fuel is a renewable oil, such as triglycerides from any feedstock, esterification products, waste vegetable oils, tallow, tall oils or combinations thereof.

24. The additive composition of claim 1 wherein:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution

selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl, ethyl, n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein the combustible fuel is other alcohols, such as long-chain saturated fatty alcohols which are solid at room (ambient) temperature, having between about 12 and 18 carbon atoms.

25. An additive composition for a combustible fuel, which may also be used itself as a fuel composition, to utilize readily available and renewable resources and produce improved fuel performance and combustion, which fuel comprises a composition of components:

a. one or more alcohols selected from the group consisting of water-soluble alcohols having between about 1 and 5 carbon atoms as defined herein in an anhydrous state or as a 0.5-36% aqueous solution; and one or more of the following:

b. one or more alcohols selected from the group consisting of clear, liquid saturated or unsaturated, straight- or branched-chain alcohols having from between about 6 and 18 carbon atoms;

c. one or more ethoxylated alcohols selected from the group consisting of alcohols having between 6 and 18 carbon atoms, where the ethylene oxide add-on is less than 5 moles;

d. a fatty acid of the structure R-(C=O)-0H, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms, with

e. a source of nitrogen in an anhydrous state or as an aqueous solution selected from the group consisting of the ammonia, hydrazine, alkyl hydrazine, dialkyl hydrazine, urea, ethanolamine, monoalkyl ethanolamine, and dialkyl ethanolamine wherein alkyl is independently selected from methyl ethyl n-propyl or isopropyl, wherein trialkylamines are excluded;

wherein the above composition comprises the total combustible fuel and the ratio of the other combustible fuels: above composition is 0:100.

26. An additive composition for a combustible fuel to produce improved combustion and reduced smoke and particulate production of the fuel, which additive comprises a composition of components:

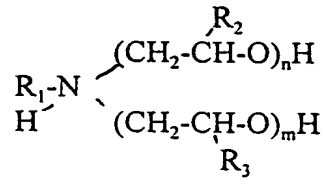
a. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms is present in between about 15 and 60 parts by volume;

b. at least one alcohol selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol and clear liquid alcohols having from between about 6 and 12 carbon atoms, is present in between about 18 and 75 parts by volume, where methanol is combined with at least one other alcohol;

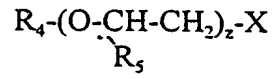
c. water which is present in between about 2 and 32 parts by volume; and

d. urea sufficient to neutralize between about 40 to 70 percent of the fatty acid of subpart a;

wherein the additive composition optionally excludes ethylene glycol, glycerine, polyethylene, polypropylene, aromatic organic coumpounds, sulfur, sulfur compounds, metals, metal compounds, compounds of phenanthrene, and emulsifiers of the general formula:



or



wherein R_1 and R_4 each independently is a saturated or unsaturated, straight-chain or branched hydrocarbon aliphatic radical each of 4 to 24 C atoms (e.g., alkyl or alkenyl) or R_4 is alkylphenyl of 1 to 18 C atoms in the optionally branched alkyl chain or H; R_2, R_3 and R_5 each independently represent a methyl group of H, n plus m is a number from 1 to 20; z is a number from 0 to 15; and X is -COO(-) or -OCH_2COO(-), wherein, substitutents R_2, R_3 and R_5 the same or different in different monomer units of each chain, and optionally other organic diacids are excluded.

Preferably the fuel/additive is in a ratio to produce a water-in-oil (w/o) emulsion, i.e., between about 50:50 to 95:5, more preferably between about 65:35 to 90:10, and most preferably about 80:20 to 85:15.

27. An additive composition for a combustible fuel to produce improved combustion and reduced smoke and particulate production of the fuel, which additive

comprises a composition of components:

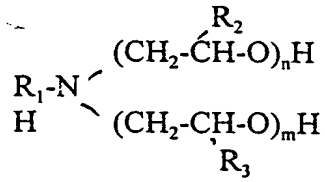
a. a fatty acid of the structure R-(C=O)-OH, wherein R is selected from alkyl, alkenyl or alkynyl having from about 10 to 24 carbon atoms is present in between about 15 and 60 parts by volume;

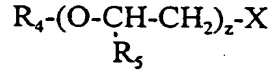
b. ethanol is present in between about 18 and 75 parts;

c. water which is present in between about 2 and 32 parts by volume; and

d. urea and/or ammonia sufficient to neutralize between about 40 to 70 percent of the fatty acid of subpart a;

wherein the additive composition optionally excludes ethylene glycol, glycerine, polyethylene, polyoxyethylene, polyoxypropylenes, aromatic organic coumpounds, sulfur, sulfur compounds, metals, metal compounds, compounds of phenanthrene, and emulsifiers of the general formula:





wherein R_1 and R_4 each independently is a saturated or unsaturated, straight-chain or branched hydrocarbon aliphatic radical each of 4 to 24 C atoms (e.g., alkyl or alkeny) or R_4 is also can be alkylphenyl of 1 to 18 C atoms in the optioanlly branched alkyl chain or H; R_2, R_3 and R_5 each independently represent a methyl group or H, n plus m is to be a number from 1 to 20; z can be a number from 0 to 15; and X is -COO(-) or -OCH_2COO(-), wherein, substitutents R_2, R_3 and R_5 are the same or different in different monomer units of each chain, and optionally other organic diacids are excluded, wherein the fuel/additive is a ratio to produce a water-in-oil (w/o) emulsion, between about 65:35 to 90:10 by volume.

28. The addition of claim 1 which is selected from the group consisting of:

a)	fatty acid (linoleic/oleic (50:50)	24 parts by volume
	C8-10 alcohol (2 EH-1)	8 parts by volume
	5% aqueous ethanol, denatured with methanol	32 parts by volume
	ammonia	3.3 parts by volume

where the additive: fossil fuel ratio is 10:90 to 5:95; or

b)	fatty acid (linoleic/oleic (50:50)	16 parts by volume
	C8-10 alcohol (2 EH-1)	16 parts by volume
	5% aqueous ethanol, denatured with methanol	32 parts by volume
	ammonia	2.2 parts by volume

where the additive: fossil fuel ratio is 10:90 to 5:95

29. A method to determine the suitability of a composition as a useful additive to a combustible fuel to improve combustion, which method comprises:

a. combining first a fatty acid at ambient conditions with water in soluble alcohol;

b. adding water soluble alcohol, water or combinations thereof; observing a cloudy mixture when water is added;

c. adding aqueous ammonia with low shear agitation with the production of mild heat of reaction and observing clearing of the mixture forming an emulsion; and

d. adding the clear mixture of step (c) to diesel fuel observing a clear mixture of addition with (diesel fuel, with the proviso that if clearing doesn't occur in both step (c) and step (d) then the microemulsion formed by the additive/diesel fuel will not be stable and will separate over time or at temperature below 0°C.